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EXAMINER
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ART UNIT	PAPER NUMBER
3694	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/620,293	YEATES ET AL.
	Examiner	Art Unit	
	JAMIE H. SWARTZ	3694	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _13 March 2008_.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-62_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-62_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
         application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Status

1.   This non-final action is in response to the amendment filed March 13, 2008. No

claims have been added. No claims have been amended.

Response to Arguments

2.   Applicant's arguments filed March 13, 2008 have been fully considered but they

are not persuasive. The applicant argues that for claims 1 and 2 that Willard does not

teach a contract identification. The examiner respectfully disagrees. Based on the

description in the specification on a broadest reasonable interpretation the contract

identification notification merely appears to be a way of checking and confirming the

transaction/settlement based on the entities involved in the transactions. Because the

applicant can be their own lexicographer the examiner is not required to find the actual

phrasing of "contract identification." Thus Willard does teach checking and settlement. It

is known to one of ordinary skill in the art that the use of any type of credit card machine

with certain logos requires a contract with that company. For example if a company

wants to take a Visa card, they are required to sign a contract with Visa. Every time a

Visa card is swiped the machine tells the merchant by checking the databases of

acceptable cards whether or not that card can be accepted. If the merchant does not

have a contract with Visa, when the card is swiped it will not clear through. This all

occurs during the authorization/transaction step when using a credit card.

3.   Regarding claim 58, the applicant argues that Willard does not teach an

acknowledgement to a financial institution independently of receipt of an

acknowledgment from the merchant in response to financial authorization results. The

examiner respectfully disagrees. Willard includes in ¶ 49 details of authorization and

confirmation after settlements.

4.   Regarding the traversal of the Official Notice of claims 5, 7-9, 22-24, 33-34, 36,

38, 41, 46-48, 53-55, and 57. To adequately traverse an Official Notice, an applicant

must specifically point out the supposed errors in the examiner's action. Which include

stating why the noticed fact is not considered to be common knowledge or well-known

in the art. See 37 CFR 1.111(b). Regarding claim 5, because the applicant's traversal is

not adequate, the Official Notice of a data format of two bytes of 8 data bits each is now

taken to be admitted prior art. Regarding claims 7-9, 22-24, 33-34, 36, 46, 53, 57,

because the applicant's traversal is not adequate, the Official Notice of the use of cache

memory being old and well known in the art is now taken to be admitted prior art.

Regarding claim 41 because the applicant's traversal is not adequate, the Official Notice

that storing duplicate data is old and well known in the art is now taken to be admitted

prior art.

Claim Rejections - 35 USC § 112

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

6.   Claims 1-16, 21, 47, and 54 are rejected under 35 U.S.C. 112, second

paragraph, as being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention.

7.   Regarding claims 1-6, 21, 47, 54, the phrase "contract identification" renders the

claim indefinite because it is unclear what type or form of contract the applicant is

claiming. According to the specification ¶ 32 includes "the supplemental header carries

a small amount of data which is used as a key to index a database in payment

processing gateway 16. One example of such a field is one which identifies the

financial contract(s) and terms of operation for a particular acquiring banks or financial

networks and the payment gateway provider. Such a 'contract ID' field can be used by

the payment processing gateway 16 to access a small list of valid contract IDs." Within

the description of contract Ids is the phrase "a particular acquiring banks." It is unclear

what the applicant means to be a contract ID because of the phrasing used. What does

the applicant mean by "a particular acquiring banks?" The use of a contract

identification appears to be a tool used to compare one entity with another in order to

complete a settlement.

Claim Rejections - 35 USC § 103

8.   The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

10.   Claim 1-2, 6, 10-11, 17, 18, 20, 21, 25, 27, 31, 58, 61 rejected under 35 U.S.C.

103(a) as being unpatentable over Willard (US 20050192892 A1) in view of Narin (US

6966034 B2) in further view of Epstein (US 20030004828 A1).

11.   Regarding claim 1, Willard teaches a payment processing gateway server for

processing financial transactions (¶ 37). Willard teaches a network interface configured

to couple to a network and receive first financial transaction authorization requests, the

first financial transaction authorization requests received from merchants and include

transaction specific data, merchant and or store related data which is related to a

merchant generating the authorization request (¶ 37). Willard teaches a gateway

processor configured to process first financial transaction authorization requests

received through the network interface (¶ 37, 43). Willard teaches a financial network

interface configured to couple to at least one financial network and transmit second

financial transaction authorization requests to a financial institution coupled to the at

least one financial network based upon first financial transaction authorization requests,

the financial network interface further configured to receive first financial transaction

authorization results from the financial institution (¶ 37, 43, 49). Willard teaches the

network interface further configured to send second financial transaction authorization

results to merchants in response to the first financial transaction authorization results (¶ 37, 43, 49-50). Willard teaches including a contract identification field which identifies a contract with a payment provider (¶ 37, 43, 49-50). Willard does not specifically teach a supplemental header. However, Narin teaches a supplemental header (col. 4, line 4 – col. 6, line 60). Willard teaches loading money by transferring data in real-time through existing technology over a network. Narin teaches servicing requests for data transmitted across such a network, such as requests for web pages from a server computing device, such as an Internet server. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include a supplemental header. A supplemental header at the time of the invention was a well known part of a message format. A supplemental header can be used to store any kind of information (including financial data) and the information that controls the process would operate the same whether in the supplemental header or in the message body. The information is not changed or modified based on being in the supplemental header. A supplemental header is a convenient place to store the information to control a process, as it is a place that is easier to access for a wider variety of software packages. Willard teaches a network interface but does not specifically teach a public network interface. However, Epstein teaches a public network interface (¶ 12-25). Willard teaches loading money by transferring data in real-time through existing technology over a network. Epstein teaches network communications and database maintenance including a system to facilitate Internet commerce. Both Willard and Epstein use network communications for the facilitation of Internet commerce. It would

have been obvious to one of ordinary skill in the art at the time of the invention to modify
Willard to include the details of a public network interface. The current invention uses a
public network as a mode for request of a transaction and then a financial network is
used to process the request. Willard uses an in person mode for the request of a
transaction and then uses a financial network to process the request. It would have
been obvious to one of ordinary skill in the art at the time of the invention to make use of
a public network to automate a previously manual activity. The use of technology is
efficient and saves time and money.

12.   Regarding claim 2, Willard teaches a memory containing a listing of valid contract
identifications and wherein data in the contract identification field is compared with the
contract identifications contained in the memory (¶ 37, 39, 43, 49-50).

13.   Regarding claim 6, Willard teaches wherein the gateway server includes a
memory which contains log data related to data carried in the contract identification field
of information holder received from a plurality of first financial transaction authorization
requests (¶ 37-44). Willard does not specifically teach a supplemental header. However,
Narin teaches a supplemental header (col. 4, line 4 – col. 6, line 60). Willard teaches
loading money by transferring data in real-time through existing technology over a
network. Narin teaches servicing requests for data transmitted across such a network,
such as requests for web pages from a server computing device, such as an Internet
server. It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify Willard to include a supplemental header. A supplemental header at the time of the invention was a well known part of a message format. A supplemental header can be used to store any kind of information and the information that controls the process would operate the same whether in the supplemental header or in the message body. The information is not changed or modified based on being in the supplemental header. A supplemental header is a convenient place to store the information to control a process, as it is a place that is easier to access for a wider variety of software packages.

14.   Regarding claim 10, Willard teaches wherein the gateway processor maintains an open socket connection with a financial institution throughout the financial network interface during processing of a financial transaction authorization request (¶ 49). Willard discloses an open Internet connection with a financial institution.

15.   Regarding claim 11, Willard teaches wherein the information holder includes a payment type field (¶ 43, 49-56). Willard does not specifically teach a supplemental header. However, Narin teaches a supplemental header (col. 4, line 4 – col. 6, line 60). Willard teaches loading money by transferring data in real-time through existing technology over a network. Narin teaches servicing requests for data transmitted across such a network, such as requests for web pages from a server computing device, such as an Internet server. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include a supplemental header. A

supplemental header at the time of the invention was a well known part of a message format. A supplemental header can be used to store any kind of information and the information that controls the process would operate the same whether in the supplemental header or in the message body. The information is not changed or modified based on being in the supplemental header. A supplemental header is a convenient place to store the information to control a process, as it is a place that is easier to access for a wider variety of software packages.

16.   Regarding claim 17, Willard teaches a payment processing gateway server for processing financial transactions (¶ 37). Willard teaches a network interface configured to couple to a network and receive first financial authorization requests, financial transaction the first authorization requests received from merchants and include transaction specific data, merchant and/or related data which is related to a merchant generating the authorization request (¶ 37). Willard teaches a gateway processor configured to process first financial transaction authorization requests received through the network interface (¶ 37, 43). Willard teaches a financial network interface configured to couple to at least one financial network and transmit second financial transaction authorization requests to a financial institution coupled to the at least one financial network based upon first financial transaction authorization requests, the financial network interface further configured to receive first financial transaction authorization results from the financial institution (¶ 37, 43, 49). Willard teaches the network interface further configured to send second financial transaction authorization results to

merchants in response to the first financial transaction authorization results (¶ 37, 43,

49-50). Willard teaches a payment type identification field which identifies a financial

network coupled to the financial network interface for processing the first financial

transaction authorization request (¶ 37, 43, 49-50). Willard does not specifically teach a

supplemental header. However, Narin teaches a supplemental header (col. 4, line 4 –

col. 6, line 60). Willard teaches loading money by transferring data in real-time through

existing technology over a network. Narin teaches servicing requests for data

transmitted across such a network, such as requests for web pages from a server

computing device, such as an Internet server. It would have been obvious to one of

ordinary skill in the art at the time of the invention to modify Willard to include a

supplemental header. A supplemental header at the time of the invention was a well

known part of a message format. A supplemental header can be used to store any kind

of information (including financial data) and the information that controls the process

would operate the same whether in the supplemental header or in the message body.

The information is not changed or modified based on being in the supplemental header.

A supplemental header is a convenient place to store the information to control a

process, as it is a place that is easier to access for a wider variety of software

packages. Willard teaches a network interface but does not specifically teach a public

network interface. However, Epstein teaches a public network interface (¶ 12-25).

Willard teaches loading money by transferring data in real-time through existing

technology over a network. Epstein teaches network communications and database

maintenance including a system to facilitate Internet commerce. Both Willard and

Epstein use network communications for the facilitation of Internet commerce. It would

have been obvious to one of ordinary skill in the art at the time of the invention to modify

Willard to include the details of a public network interface. The current invention uses a

public network as a mode for request of a transaction and then a financial network is

used to process the request. Willard uses an in person mode for the request of a

transaction and then uses a financial network to process the request. It would have

been obvious to one of ordinary skill in the art at the time of the invention to make use of

a public network to automate a previously manual activity. The use of technology is

efficient and saves time and money.

17.   Regarding claim 18, Willard teaches wherein the payment type identification field

identifies a transaction type, payment network and/or protocol (¶ 37-43)

18.   Regarding claim 20, Willard teaches wherein the payment type identification field

describes a protocol format of the transaction specific data (¶ 38).

19.   Regarding claim 21, Willard teaches wherein the information holder further

includes a contract identification field which identifies a contract with a payment provider

(¶ 37-39). Willard does not specifically teach a supplemental header. However, Narin

teaches a supplemental header (col. 4, line 4 – col. 6, line 60). Willard teaches loading

money by transferring data in real-time through existing technology over a network.

Narin teaches servicing requests for data transmitted across such a network, such as requests for web pages from a server computing device, such as an Internet server. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include a supplemental header. A supplemental header at the time of the invention was a well known part of a message format. A supplemental header can be used to store any kind of information and the information that controls the process would operate the same whether in the supplemental header or in the message body. The information is not changed or modified based on being in the supplemental header. A supplemental header is a convenient place to store the information to control a process, as it is a place that is easier to access for a wider variety of software packages.

20.   Regarding claim 25, Willard teaches wherein the gateway processor maintains an open socket connection with a financial institution through the financial network interface during processing of a financial transaction authorization request (¶ 49). Willard discloses an open Internet connection with a financial institution.

21.   Regarding claim 27, Willard teaches wherein the gateway processor maintains an open socket connection with a merchant through the public network during processing of a financial transaction authorization request (¶ 49). Willard discloses an open Internet connection with a financial institution.

22.   Regarding claim 58, Willard teaches a payment processing gateway server for processing debit type financial transactions (¶ 37). Willard teaches a network interface configured to couple to a network and receive first financial transaction authorization requests, the first financial transaction authorization requests received from merchants and include transaction specific data, and merchant and/or store related data which is related to a merchant generating the authorization request (¶ 37-56). Willard teaches a gateway processor configured to process first financial transaction authorization requests received through the network interface (¶ 38-39, 55-56). Willard teaches a financial network interface configured to couple to at least one financial network and transmit second financial transaction authorization requests to a financial institution coupled to the at least one financial network based upon first financial transaction authorization requests, the financial network interface further configured to receive first financial transaction authorization results from the financial institution (¶ 38-39, 51, 55-56). Willard teaches a network interface further configured to send second financial transaction authorization results to merchants in response financial transaction results (¶ 43-50). Willard teaches the first authorization financial network interface further configured to send an acknowledgement to the financial institution independently of receipt of an acknowledgement from the merchant in response to the second financial authorization results (¶ 43-50). Willard does not specifically teach a supplemental header. However, Narin teaches a supplemental header (col. 4, line 4 – col. 6, line 60). Willard teaches loading money by transferring data in real-time through existing technology over a network. Narin teaches servicing requests for data transmitted across

such a network, such as requests for web pages from a server computing device, such
as an Internet server. It would have been obvious to one of ordinary skill in the art at the
time of the invention to modify Willard to include a supplemental header. A
supplemental header at the time of the invention was a well known part of a message
format. A supplemental header can be used to store any kind of information and the
information that controls the process would operate the same whether in the
supplemental header or in the message body. The information is not changed or
modified based on being in the supplemental header. A supplemental header is a
convenient place to store the information to control a process, as it is a place that is
easier to access for a wider variety of software packages. Willard teaches a network
interface but does not specifically teach a public network interface. However, Epstein
teaches a public network interface (¶ 12-25). Willard teaches loading money by
transferring data in real-time through existing technology over a network. Epstein
teaches network communications and database maintenance including a system to
facilitate Internet commerce. Both Willard and Epstein use network communications for
the facilitation of Internet commerce. It would have been obvious to one of ordinary skill
in the art at the time of the invention to modify Willard to include the details of a public
network interface. The current invention uses a public network as a mode for request of
a transaction and then a financial network is used to process the request. Willard uses
an in person mode for the request of a transaction and then uses a financial network to
process the request. It would have been obvious to one of ordinary skill in the art at the

time of the invention to make use of a public network to automate a previously manual

activity. The use of technology is efficient and saves time and money.

23.

24.   Regarding claim 61, Willard teaches wherein the gateway processing sends an

acknowledgement to the financial institution (¶ 43-50).

25.   Claims 3-4, 15, and 31 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Willard (US 20050192892 A1) in view of Narin (US 6966034 B2), in

further view of Talati et al. (US 5903878 A) in further view of Epstein (US 20030004828

A1).

26.   Regarding claim 3, Willard teaches a public network interface and a gateway

processor for financial transactions. However, Willard does not specifically teach a

NACK message. However, Talati teaches wherein the gateway server sends a NACK

message to a merchant through the public network interface if the data in the contract

identification field does not match the valid contract identifications contained in memory

(col. 9, lines 10-67). Willard teaches loading money by transferring data in real-time

through existing technology over a network. Narin teaches servicing requests for data

transmitted across such a network, such as requests for web pages from a server

computing device, such as an Internet server. It would have been obvious to one of

ordinary skill in the art at the time of the invention to modify Willard to include the details

of a NACK message. Sending a NACK is for the receiving station to not acknowledge
that it has received packets. By not receiving an ACK, the sender could assume that the
receiver is overflowing or the network is congested and slow down its transmission.
TCP receivers use ACK to inform a sending host that packets have arrived. If the ACK
is not sent, the sender assumes packets have been lost. NACK is used to indicate that
a packet has been corrupted and to resend it. A checksum error may indicate a
corrupted packet. A NACK is different than a normal acknowledgment in that it indicates
that a packet was received in a corrupted state rather than not received at all. When
sending information over a network it is important to know whether or not the data was
received. If the data is not received it is important to be alerted that it needs to be
resent.

27.   Regarding claim 4, Willard teaches a public network interface and a gateway
processor for financial transactions. However, Willard does not specifically teach an
ACK message. However, Talati teaches wherein the gateway server sends an ACK
message to a merchant through the public network interface if the data in the contract
identification field matches a valid contract identification contained in memory (col. 9,
lines 10-67). Willard teaches loading money by transferring data in real-time through
existing technology over a network. Narin teaches servicing requests for data
transmitted across such a network, such as requests for web pages from a server
computing device, such as an Internet server. It would have been obvious to one of
ordinary skill in the art at the time of the invention to modify Willard to include an ACK

message. An ACK is a confirmation of receipt. When data is transmitted between two systems, the recipient can acknowledge that it received the data. When sending information over a network it is important to know whether or not the data was received.

28.   Regarding claims 15 and 31, Willard teaches a public network interface and a gateway processor for financial transactions. However, Willard does not specifically teach an ACK message. However, Talati teaches wherein an ACK transmission through the public network interface by the gateway server to a merchant does not precede a transmission of an authorization result (col. 9, lines 10-67). Willard teaches loading money by transferring data in real-time through existing technology over a network. Narin teaches servicing requests for data transmitted across such a network, such as requests for web pages from a server computing device, such as an Internet server. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include an ACK message. An ACK is a confirmation of receipt. When data is transmitted between two systems, the recipient can acknowledge that it received the data. When sending information over a network it is important to know whether or not the data was received.

29.   Claims 5, 7-9, 22-24, 33-34, 36, 38, 41, 46-48, 53-55, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willard (US 20050192892 A1) in view of Narin (US 6966034 B2) in further view of Epstein (US 20030004828 A1) in further view of Official Notice (now admitted prior art).

30.   Regarding claim 5, Willard teaches contract identification (¶ 37-39). Willard does

not specifically teach wherein the field comprises two bytes of 8 data bits each. Official

Notice (now admitted prior art) is taken that a data format of two bytes of 8 data bits

each was well known at the time of the invention. 1 byte having 8 bits is ubiquitous. That

specific size is convenient to many architectures.

31.   Regarding claim 7, Willard teaches including a memory containing a memory of

merchant or store/location invariant data and wherein the financial transaction

authorization requests include a memory-key field which identifies data in the memory

(¶ 51). Official Notice (now admitted prior art) is taken that the use of cache memory is

old and well known as it provides the benefit of more efficiently utilizing storage. Cache

is temporary storage that conveniently stores data that is only needed temporarily. If

you stored everything in permanent storage, you'd quickly, needlessly, and inefficiently

use up valuable permanent system storage on information that is only temporarily used

which would be a waste of system resources.

32.   Regarding claim 8, Willard teaches wherein financial transaction authorization

requests include a data field and wherein the gateway processor populates the storage

area contained in the memory with data received in the data field (¶ 39). Official Notice

(now admitted prior art) is taken that the use of cache memory is old and well known as

it provides the benefit of more efficiently utilizing storage. Cache is temporary storage

that conveniently stores data that is only needed temporarily. If you stored everything in

permanent storage, you'd quickly, needlessly, and inefficiently use up valuable permanent system storage on information that is only temporarily used which would be a waste of system resources.

33.   Regarding claim 9, Willard teaches wherein the memory-key comprises a 128 bit data field (¶ 43, 51). Willard discloses merchant identifiers. Official Notice (now admitted prior art) that the use of cache memory is old and well-known as it provides the benefit of more efficiently utilizing storage. Cache is temporary storage that conveniently stores data that is only needed temporarily. If you stored everything in permanent storage, you'd quickly, needlessly, and inefficiently use up valuable permanent system storage on information that is only temporarily used which would be a waste of system resources.

34.   Regarding claim 22, Willard teaches a memory containing a memory of merchant or store/location invariant data and wherein the financial transaction authorization requests include a memory-key field which identifies data in the memory (¶ 37, 51). Official Notice (now admitted prior art) is taken that the use of cache memory is old and well known as it provides the benefit of more efficiently utilizing storage. Cache is temporary storage that conveniently stores data that is only needed temporarily. If you stored everything in permanent storage, you'd quickly, needlessly, and inefficiently use up valuable permanent system storage on information that is only temporarily used which would be a waste of system resources.

35.   Regarding claim 23, Willard teaches wherein financial transaction authorization

requests include a data field and wherein the gateway processor populates the storage

area contained in the memory with data received in the data field (¶ 37-41). Official

Notice (now admitted prior art) is taken that the use of cache memory is old and well

known as it provides the benefit of more efficiently utilizing storage. Cache is temporary

storage that conveniently stores data that is only needed temporarily. If you stored

everything in permanent storage, you'd quickly, needlessly, and inefficiently use up

valuable permanent system storage on information that is only temporarily used which

would be a waste of system resources.

36.   Regarding claim 24, Willard teaches wherein memory-key comprises a 128 bit

data field (¶ 43, 51). Willard discloses merchant identifiers. Official Notice (now admitted

prior art) that the use of cache memory is old and well known as it provides the benefit

of more efficiently utilizing storage. Cache is temporary storage that conveniently stores

data that is only needed temporarily. If you stored everything in permanent storage,

you'd quickly, needlessly, and inefficiently use up valuable permanent system storage

on information that is only temporarily used which would be a waste of system

resources.

37.   Regarding claim 33, Willard teaches a payment processing gateway server for

processing financial transactions (¶ 37). Willard teaches a network interface configured

to couple to a public network and receive first financial authorization requests, financial

transaction the first authorization requests received from merchants and which include

transaction specific data, memory-able data and a memory key (¶ 37). Willard teaches a

gateway processor configured to process first financial transaction authorization

requests received through the network interface (¶ 37, 43). Willard teaches a financial

network interface configured to couple to at least one financial network and transmit

second financial transaction authorization requests to a financial institution coupled to

the at least one financial network based upon first financial transaction authorization

requests, the financial network interface further configured to receive first financial

transaction authorization results from the financial institution (¶ 37, 43, 49). Willard

teaches and the network interface further configured to send second financial

transaction authorization results to merchants in response to the first financial

transaction authorization results (¶ 37, 43, 49-50). Willard teaches a memory configured

to memory the memory-able data from the first financial authorization request and index

the memory in accordance with the memory key (¶ 49). Official Notice (now admitted

prior art) is taken that the use of cache memory is old and well known as it provides the

benefit of more efficiently utilizing storage. Cache is temporary storage that

conveniently stores data that is only needed temporarily. If you stored everything in

permanent storage, you'd quickly, needlessly, and inefficiently use up valuable

permanent system storage on information that is only temporarily used which would be

a waste of system resources. Willard does not specifically teach a supplemental header.

However, Narin teaches a supplemental header (col. 4, line 4 – col. 6, line 60). Willard

teaches loading money by transferring data in real-time through existing technology

over a network. Narin teaches servicing requests for data transmitted across such a

network, such as requests for web pages from a server computing device, such as an

Internet server. It would have been obvious to one of ordinary skill in the art at the time

of the invention to modify Willard to include a supplemental header. A supplemental

header at the time of the invention was a well known part of a message format. A

supplemental header can be used to store any kind of information and the information

that controls the process would operate the same whether in the supplemental header

or in the message body. The information is not changed or modified based on being in

the supplemental header. A supplemental header is a convenient place to store the

information to control a process, as it is a place that is easier to access for a wider

variety of software packages. Willard teaches a network interface but does not

specifically teach a public network interface. However, Epstein teaches a public network

interface (¶ 12-25). Willard teaches loading money by transferring data in real-time

through existing technology over a network. Epstein teaches network communications

and database maintenance including a system to facilitate Internet commerce. Both

Willard and Epstein use network communications for the facilitation of Internet

commerce. It would have been obvious to one of ordinary skill in the art at the time of

the invention to modify Willard to include the details of a public network interface. The

current invention uses a public network as a mode for request of a transaction and then

a financial network is used to process the request. Willard uses an in person mode for

the request of a transaction and then uses a financial network to process the request. It

would have been obvious to one of ordinary skill in the art at the time of the invention to

make use of a public network to automate a previously manual activity. The use of

technology is efficient and saves time and money.

38.   Regarding claim 34, Willard teaches wherein the memory key comprises 128 bits

of data (¶ 37, 51). Official Notice (now admitted prior art) is taken that the use of cache

memory is old and well known as it provides the benefit of more efficiently utilizing

storage. Cache is temporary storage that conveniently stores data that is only needed

temporarily. If you stored everything in permanent storage, you'd quickly, needlessly,

and inefficiently use up valuable permanent system storage on information that is only

temporarily used which would be a waste of system resources.

39.   Regarding claim 36, Willard teaches wherein the memory key comprises data

indicative of a merchant (¶ 43-47). Official Notice (now admitted prior art) is taken that

the use of cache memory is old and well known as it provides the benefit of more

efficiently utilizing storage. Cache is temporary storage that conveniently stores data

that is only needed temporarily. If you stored everything in permanent storage, you'd

quickly, needlessly, and inefficiently use up valuable permanent system storage on

information that is only temporarily used which would be a waste of system resources.

40.   Regarding claim 38, Willard teaches wherein the gateway processor provides a

web service on the public network interface (¶ 37-45).

41.   Regarding claim 41, Willard teaches a public network interface, a gateway

processor, a financial network, and a memory. Official Notice (now admitted prior art) is

taken that storing duplicate data is old and well known. It is also old and well known that

this data would be referred to as a backup. Official Notice (now admitted prior art) that

the use of cache memory is old and well known as it provides the benefit of more

efficiently utilizing storage. Cache is temporary storage that conveniently stores data

that is only needed temporarily. If you stored everything in permanent storage, you'd

quickly, needlessly, and inefficiently use up valuable permanent system storage on

information that is only temporarily used which would be a waste of system resources.

42.   Regarding claim 46, Willard teaches wherein the gateway processor transmits a

request message to merchants through the public network interface which requests a

transmission of memory-able data for populating the memory (¶ 43-50). Official Notice

(now admitted prior art) that the use of cache memory is old and well known as it

provides the benefit of more efficiently utilizing storage. Cache is temporary storage

that conveniently stores data that is only needed temporarily. If you stored everything in

permanent storage, you'd quickly, needlessly, and inefficiently use up valuable

permanent system storage on information that is only temporarily used which would be

a waste of system resources.

43.   Regarding claim 47, Willard teaches wherein the financial transaction authorization request includes an information holder containing a contract identification field (¶ 37, 43, 49-50). Willard does not specifically teach a supplemental header. However, Narin teaches a supplemental header (col. 4, line 4 – col. 6, line 60). Willard teaches loading money by transferring data in real-time through existing technology over a network. Narin teaches servicing requests for data transmitted across such a network, such as requests for web pages from a server computing device, such as an Internet server. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include a supplemental header. A supplemental header at the time of the invention was a well known part of a message format. A supplemental header can be used to store any kind of information and the information that controls the process would operate the same whether in the supplemental header or in the message body. The information is not changed or modified based on being in the supplemental header. A supplemental header is a convenient place to store the information to control a process, as it is a place that is easier to access for a wider variety of software packages.

44.   Regarding claim 48, Willard teaches wherein the financial transaction authorization request includes an information holder containing a payment type identification field (¶ 37, 43, 49-50, 57). Willard does not specifically teach a supplemental header. However, Narin teaches a supplemental header (col. 4, line 4 – col. 6, line 60). Willard teaches loading money by transferring data in real-time through

existing technology over a network. Narin teaches servicing requests for data

transmitted across such a network, such as requests for web pages from a server

computing device, such as an Internet server. It would have been obvious to one of

ordinary skill in the art at the time of the invention to modify Willard to include a

supplemental header. A supplemental header at the time of the invention was a well

known part of a message format. A supplemental header can be used to store any kind

of information and the information that controls the process would operate the same

whether in the supplemental header or in the message body. The information is not

changed or modified based on being in the supplemental header. A supplemental

header is a convenient place to store the information to control a process, as it is a

place that is easier to access for a wider variety of software packages.

45.   Regarding claim 53, Willard teaches a financial transaction authorization request

(¶ 50-56). Willard teaches a memory-able data field configured to contain transaction

invariant data (¶ 51). Willard teaches a memory key field configured to contain an index

key to a database list or hash-table (¶ 49, 90). Willard teaches a transaction specific

data field configured to contain data related to a financial transaction (¶ 37, 43, 49-50).

Official Notice (now admitted prior art) is taken that the use of cache memory is old and

well known as it provides the benefit of more efficiently utilizing storage. Cache is

temporary storage that conveniently stores data that is only needed temporarily. If you

stored everything in permanent storage, you'd quickly, needlessly, and inefficiently use

up valuable permanent system storage on information that is only temporarily used

which would be a waste of system resources. Willard does not specifically teach a supplemental header. However, Narin teaches a supplemental header (col. 4, line 4 – col. 6, line 60). Willard teaches loading money by transferring data in real-time through existing technology over a network. Narin teaches servicing requests for data transmitted across such a network, such as requests for web pages from a server computing device, such as an Internet server. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include a supplemental header. A supplemental header at the time of the invention was a well known part of a message format. A supplemental header can be used to store any kind of information and the information that controls the process would operate the same whether in the supplemental header or in the message body. The information is not changed or modified based on being in the supplemental header. A supplemental header is a convenient place to store the information to control a process, as it is a place that is easier to access for a wider variety of software packages.

46.   Regarding claim 54, Willard teaches wherein the information holder comprises a contract identification field (¶ 37, 43, 49-50). Willard does not specifically teach a supplemental header. However, Narin teaches a supplemental header (col. 4, line 4 – col. 6, line 60). Willard teaches loading money by transferring data in real-time through existing technology over a network. Narin teaches servicing requests for data transmitted across such a network, such as requests for web pages from a server computing device, such as an Internet server. It would have been obvious to one of

ordinary skill in the art at the time of the invention to modify Willard to include a supplemental header. A supplemental header at the time of the invention was a well known part of a message format. A supplemental header can be used to store any kind of information and the information that controls the process would operate the same whether in the supplemental header or in the message body. The information is not changed or modified based on being in the supplemental header. A supplemental header is a convenient place to store the information to control a process, as it is a place that is easier to access for a wider variety of software packages.

47.   Regarding claim 55, Willard teaches wherein the information holder comprises a payment type identification field (¶ 37, 43, 49-50, 57). Willard does not specifically teach a supplemental header. However, Narin teaches a supplemental header (col. 4, line 4 – col. 6, line 60). Willard teaches loading money by transferring data in real-time through existing technology over a network. Narin teaches servicing requests for data transmitted across such a network, such as requests for web pages from a server computing device, such as an Internet server. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include a supplemental header. A supplemental header at the time of the invention was a well known part of a message format. A supplemental header can be used to store any kind of information and the information that controls the process would operate the same whether in the supplemental header or in the message body. The information is not changed or modified based on being in the supplemental header. A supplemental

header is a convenient place to store the information to control a process, as it is a

place that is easier to access for a wider variety of software packages.

48.   Regarding claim 57, Willard teaches wherein the memory key field comprises

128 bits (¶ 51). Official Notice (now admitted prior art) is taken that the use of cache

memory is old and well known as it provides the benefit of more efficiently utilizing

storage. Cache is temporary storage that conveniently stores data that is only needed

temporarily. If you stored everything in permanent storage, you'd quickly, needlessly,

and inefficiently use up valuable permanent system storage on information that is only

temporarily used which would be a waste of system resources.

49.   Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Willard

(US 20050192892 A1) in view of Narin (US 6966034 B2) in view of Official Notice (now

admitted prior art) in further view of Steele et al. (US 7016875 B1).

50.   Regarding claim 35, Willard teaches a memory (¶ 39). Official Notice (now

admitted prior art) is taken that the use of cache memory is old and well known as it

provides the benefit of more efficiently utilizing storage. Cache is temporary storage

that conveniently stores data that is only needed temporarily. If you stored everything in

permanent storage, you'd quickly, needlessly, and inefficiently use up valuable

permanent system storage on information that is only temporarily used which would be

a waste of system resources. A cache system is old and well known in any transaction

system. The cache is a copy of something that has been recently used that is kept based on the chance that it would be faster to use it again in the cache then to retrieve it again over a network. Willard does not specifically teach a GUID. However, Steele teaches a GUID (col. 10, lines 7-56). Willard teaches loading money by transferring data in real-time through existing technology over a network. Steele teaches the storage, management, and delivery of user or consumer data on or over a network. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include a GUID. A GUID is a 128-bit integer (16 bytes) that can be used across all computers and networks wherever a unique identifier is required. Such an identifier has a very low probability of being duplicated. The term GUID is used specifically by the Microsoft Corporation for a number that its programming generates to create a unique identity for an entity such as a Word document. GUIDs are widely used in Microsoft products to identify interfaces, replica sets, records, and other objects. It helps to differentiate between different cache keys. Identifiers allow you to find the correct key quickly as oppose to trial and error. Most systems will only allow a few tries at the key before the system will shut down to protect against a brute force attack.

51.   Claims 37 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willard (US 20050192892 A1) in view of Narin (US 6966034 B2) in view of Official Notice (now admitted prior art).

52.   Regarding claim 37, Willard teaches wherein the memory storage-able data (¶

39). Official Notice (now admitted prior art) is taken that the use of cache memory is old

and well known as it provides the benefit of more efficiently utilizing storage. Cache is

temporary storage that conveniently stores data that is only needed temporarily. If you

stored everything in permanent storage, you'd quickly, needlessly, and inefficiently use

up valuable permanent system storage on information that is only temporarily used

which would be a waste of system resources. Willard does not specifically teach where

the memory includes data selected from the group of data consisting of merchant name,

country, state, location, zip code, merchant category and time zone. However, in

paragraph 37 the applicant states:

> The authorization request 200 may also contain cache-able data 206. Typical
> prior art financial transaction protocols are capable of carrying a fairly rich set of
> merchant data, including for example, merchant name (25 bytes), country (3
> bytes), state (2 bytes), location (13 bytes), city code/zip code (3 bytes), merchant
> category (4 bytes), acquirer bin (6 bytes), time zone differential (3 bytes),
> merchant category code (4 bytes), extra field separators for ease of viewing (4
> bytes) and others.

Thus the applicant admits this is prior art and not unique to their invention.

53.   Regarding claim 56, Willard teaches loading money by transferring data in real-

time through existing technology over a network. Willard does not specifically teach

wherein the transaction invariant data is selected from the data consisting of merchant

name, country, state, location, zip code, merchant category and time zone. However, in

paragraph 37 the applicant states:

> The authorization request 200 may also contain cache-able data 206. Typical
> prior art financial transaction protocols are capable of carrying a fairly rich set of
> merchant data, including for example, merchant name (25 bytes), country (3
> bytes), state (2 bytes), location (13 bytes), city code/zip code (3 bytes), merchant
> category (4 bytes), acquirer bin (6 bytes), time zone differential (3 bytes),
> merchant category code (4 bytes), extra field separators for ease of viewing (4
> bytes) and others.

Thus the applicant admits this is prior art and not unique to their invention.

54.   Claims 12-14, 26, and 28-30 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Willard (US 20050192892 A1) in view Narin (US 6966034 B2), and in

further view of Keresman et al. (US 7051002 B2) in further view of Epstein (US

20030004828 A1).

55.   Regarding claim 12, Willard teaches a public interface, a gateway processor, a

financial network, and a public network. Willard does not specifically teach a HTTPS

standard. However, Keresman teaches wherein financial transaction authorization

request is in accordance with an HTTPS standard (col. 6, line 57 – col. 7, line 7, col. 7,

line 40 – col. 8, line 37). Willard discloses transaction processing and authorization

between a customer and a merchant using computer networks. Keresman discloses a

method for processing authentication of a consumer using different types of payment

instruments to conduct a commercial transaction over a communications network with a

merchant. It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify Willard to include the details of HTTPS. HTTPS is a variant of HTTP,

which is used for handling secure transactions. In any type of computer related financial

transaction security is very important. Using HTTPS would keep important data secure.

56.   Regarding claim 13, Willard teaches a public interface, a gateway processor, a

financial network, and a public network. Willard does not specifically teach a XML

standard. However, Keresman teaches wherein a financial transaction authorization

request is in accordance with an XML standard (col. 6, line 57 – col. 7, line 7, col. 8, line

8 – col. 10, line 6). Willard discloses transaction processing and authorization between

a customer and a merchant using computer networks. Keresman discloses a method for

processing authentication of a consumer using different types of payment instruments to

conduct a commercial transaction over a communications network with a merchant. It

would have been obvious to one of ordinary skill in the art at the time of the invention to

modify Willard to include the details of XML. XML is a general-purpose markup

language. It was designed to be human and machine readable, it supports Unicode, it

contains strict syntax and parsing requirements which make necessary parsing

algorithms simple, XML is heavily used as a format for document storage and

processing, and it is based on international standards.

57.   Regarding claim 14, Willard teaches a public interface, a gateway processor, a

financial network, and a public network. Willard does not specifically teach a secure

socket layer. However, Keresman teaches wherein a financial transaction authorization

request is in accordance with a secure socket layer (col. 6, line 57 – col. 7, line 7).

Willard discloses transaction processing and authorization between a customer and a merchant using computer networks. Keresman discloses a method for processing authentication of a consumer using different types of payment instruments to conduct a commercial transaction over a communications network with a merchant. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include the details of a secure socket layer. Secure socket layer protocol is a standard for transmitting confidential data such as credit card numbers over the Internet. Most true business sites support this feature, which allows more security in data, transmitted over the WWW. This is the standard minimum safe security level for true business on the Internet.

58.   Regarding claim 26, Willard teaches a public interface, a gateway processor, a financial network, and a public network. Willard does not specifically teach a secure socket layer. However, Keresman teaches wherein socket comprises an SSL connection (col. 6, line 57 – col. 7, line 7). Willard discloses transaction processing and authorization between a customer and a merchant using computer networks. Keresman discloses a method for processing authentication of a consumer using different types of payment instruments to conduct a commercial transaction over a communications network with a merchant. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include the details of a secure socket layer. Secure socket layer protocol is a standard for transmitting confidential data such as credit card numbers over the Internet. Most true business sites support this feature,

which allows more security in data, transmitted over the WWW. This is the standard minimum safe security level for true business on the Internet.

59.   Regarding claim 28, Willard teaches a public interface, a gateway processor, a financial network, and a public network. Willard does not specifically teach a HTTPS standard. However, Keresman wherein the first financial transaction authorization requests are in accordance with an HTTPS standard teaches wherein financial transaction authorization request is in accordance with an HTTPS standard (col. 6, line 57 – col. 7, line 7, col. 7, line 40 – col. 8, line 37). Willard discloses transaction processing and authorization between a customer and a merchant using computer networks. Keresman discloses a method for processing authentication of a consumer using different types of payment instruments to conduct a commercial transaction over a communications network with a merchant. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include the details of HTTPS. HTTPS is a variant of HTTP, which is used for handling secure transactions. In any type of computer related financial transaction security is very important. Using HTTPS would keep important data secure.

60.   Regarding claim 29, Willard teaches a public interface, a gateway processor, a financial network, and a public network. Willard does not specifically teach a XML standard. However, Keresman teaches wherein a financial transaction authorization request is in accordance with an XML standard (col. 6, line 57 – col. 7, line 7, col. 8, line 8 – col. 10, line 6). Willard discloses transaction processing and authorization between

a customer and a merchant using computer networks. Keresman discloses a method for

processing authentication of a consumer using different types of payment instruments to

conduct a commercial transaction over a communications network with a merchant. It

would have been obvious to one of ordinary skill in the art at the time of the invention to

modify Willard to include the details of XML. XML is a general-purpose markup

language. It was designed to be human and machine readable, it supports Unicode, it

contains strict syntax and parsing requirements which make necessary parsing

algorithms simple, XML is heavily used as a format for document storage and

processing, and it is based on international standards.

61.   Regarding claim 30, Willard teaches a public interface, a gateway processor, a

financial network, and a public network. Willard does not specifically teach a secure

socket layer. However, Keresman teaches wherein a financial transaction authorization

request is in accordance with a secure socket layer (col. 6, line 57 – col. 7, line 7).

Willard discloses transaction processing and authorization between a customer and a

merchant using computer networks. Keresman discloses a method for processing

authentication of a consumer using different types of payment instruments to conduct a

commercial transaction over a communications network with a merchant. It would have

been obvious to one of ordinary skill in the art at the time of the invention to modify

Willard to include the details of a secure socket layer. Secure socket layer protocol is a

standard for transmitting confidential data such as credit card numbers over the

Internet. Most true business sites support this feature, which allows more security in

data, transmitted over the WWW. This is the standard minimum safe security level for

true business on the Internet.

62.   Claims 49-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Willard (US 20050192892 A1) in view Narin (US 6966034 B2) in view of Official Notice

(now admitted prior art) and in further view of Keresman et al. (US 7051002 B2).

63.   Regarding claim 49, Willard teaches a public interface, a gateway processor, a

financial network, and a public network. Willard does not specifically teach a HTTPS

standard. However, Keresman wherein the first financial transaction authorization

requests are in accordance with an HTTPS standard teaches wherein financial

transaction authorization request is in accordance with an HTTPS standard (col. 6, line

57 – col. 7, line 7, col. 7, line 40 – col. 8, line 37). Willard discloses transaction

processing and authorization between a customer and a merchant using computer

networks. Keresman discloses a method for processing authentication of a consumer

using different types of payment instruments to conduct a commercial transaction over a

communications network with a merchant. It would have been obvious to one of

ordinary skill in the art at the time of the invention to modify Willard to include the details

of HTTPS. HTTPS is a variant of HTTP, which is used for handling secure transactions.

In any type of computer related financial transaction security is very important. Using

HTTPS would keep important data secure.

64.   Regarding claim 50, Willard teaches a public interface, a gateway processor, a

financial network, and a public network. Willard does not specifically teach a XML

standard. However, Keresman teaches wherein a financial transaction authorization

request is in accordance with an XML standard (col. 6, line 57 – col. 7, line 7, col. 8, line

8 – col. 10, line 6). Willard discloses transaction processing and authorization between

a customer and a merchant using computer networks. Keresman discloses a method for

processing authentication of a consumer using different types of payment instruments to

conduct a commercial transaction over a communications network with a merchant. It

would have been obvious to one of ordinary skill in the art at the time of the invention to

modify Willard to include the details of XML. XML is a general-purpose markup

language. It was designed to be human and machine readable, it supports Unicode, it

contains strict syntax and parsing requirements which make necessary parsing

algorithms simple, XML is heavily used as a format for document storage and

processing, and it is based on international standards.

65.   Regarding claim 51, Willard teaches a public interface, a gateway processor, a

financial network, and a public network. Willard does not specifically teach a secure

socket layer. However, Keresman teaches wherein a financial transaction authorization

request is in accordance with a secure socket layer (col. 6, line 57 – col. 7, line 7).

Willard discloses transaction processing and authorization between a customer and a

merchant using computer networks. Keresman discloses a method for processing

authentication of a consumer using different types of payment instruments to conduct a

commercial transaction over a communications network with a merchant. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include the details of a secure socket layer. Secure socket layer protocol is a standard for transmitting confidential data such as credit card numbers over the Internet. Most true business sites support this feature, which allows more security in data, transmitted over the WWW. This is the standard minimum safe security level for true business on the Internet.

66.   Claims 16, 32, and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willard (US 20050192892 A1), in view Narin (US 6966034 B2), in further view of Jacobs et al. (US 6334114 B1) in further view of Epstein (US 20030004828 A1).

67.   Regarding claim 16, Willard teaches a public interface, a gateway processor, a financial network, and a public network. Willard does not specifically teach a stateless logic. However, Jacobs teaches wherein the gateway processor processes financial transaction authorization implementation synchronizes requests using a stateless logic and the gateway processor further socket sessions with financial institutions through the financial network interface (col. 18, line 45 – col. 32, line 14). Willard discloses transaction processing and authorization between a customer and a merchant using computer networks. Jacob discloses processing transactions in networked computer systems. It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify Willard to include the details of a stateless logic. Stateless treats each request as an independent transaction, unrelated to any previous request. This simplifies the server design because it does not need to allocate storage to deal with conversations in progress or worry about freeing it if a client dies in mid-transaction.

68.   Regarding claim 32, Willard teaches a public interface, a gateway processor, a financial network, and a public network. Willard does not specifically teach a stateless logic. However, Jacobs teaches wherein the gateway processor processes financial transaction authorization requests using a stateless logic implementation and the gateway processor further synchronizes socket sessions with financial institutions through the financial network interface (col. 18, line 45 – col. 32, line 14). Willard discloses transaction processing and authorization between a customer and a merchant using computer networks. Jacob discloses processing transactions in networked computer systems. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include the details of a stateless logic. Stateless treats each request as an independent transaction, unrelated to any previous request. This simplifies the server design because it does not need to allocate storage to deal with conversations in progress or worry about freeing it if a client dies in mid-transaction.

69.   Regarding claim 62, Willard teaches a public interface, a gateway processor, a financial network, and a public network. Willard does not specifically teach a stateless

logic. However, Jacobs teaches wherein operation of the gateway processor on the

financial transaction authorization requests is stateless (col. 18, line 45 – col. 32, line

14). Willard discloses transaction processing and authorization between a customer and

a merchant using computer networks. Jacob discloses processing transactions in

networked computer systems. It would have been obvious to one of ordinary skill in the

art at the time of the invention to modify Willard to include the details of a stateless

logic. Stateless treats each request as an independent transaction, unrelated to any

previous request. This simplifies the server design because it does not need to allocate

storage to deal with conversations in progress or worry about freeing it if a client dies in

mid-transaction.

70.   Claims 40 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Willard (US 20050192892 A1), in view of Narin (US 6966034 B2), in view of Official

Notice (now admitted prior art), in further view of Jacobs et al. (US 6334114 B1).

71.   Regarding claim 40, Willard teaches a public interface, a gateway processor, a

financial network, and a public network. Willard does not specifically teach a runtime

environment. However, Jacobs teaches wherein the gateway processor operates in

accordance with a common language run time environment (col. 7, line 63 – col. 10, line

3). Willard discloses transaction processing and authorization between a customer and

a merchant using computer networks. Jacob discloses processing transactions in

networked computer systems. It would have been obvious to one of ordinary skill in the

art at the time of the invention to modify Willard to include the details of a runtime environment. A runtime environment is important because it is a collection of subroutines and environment variables that provide commonly used functions and data for a program while it is running. A runtime environment is used to abstract the hardware details out of the code implementation, so that the code can be written once and run on any kind of CPU or operating system, as long as that machine has a runtime environment.

72.   Regarding claim 52, Willard teaches a public interface, a gateway processor, a financial network, and a public network. Willard does not specifically teach a stateless logic. However, Jacobs teaches wherein the gateway processor processes financial transaction authorization requests using a stateless logic implementation and the gateway processor further synchronizes socket sessions with financial institutions through the financial network interface (col. 18, line 45 – col. 32, line 14). Willard discloses transaction processing and authorization between a customer and a merchant using computer networks. Jacob discloses processing transactions in networked computer systems. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include the details of a stateless logic. Stateless treats each request as an independent transaction, unrelated to any previous request. This simplifies the server design because it does not need to allocate storage to deal with conversations in progress or worry about freeing it if a client dies in mid-transaction.

73.   Claims 39, 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Willard (US 20050192892 A1), in view Narin (US 6966034 B2), in view of Official

Notice (now admitted prior art), in further view of Courts et al. (US 6480894).

74.   Regarding claim 39, Willard teaches a public interface, a gateway processor, a

financial network, and a public network. Willard does not specifically teach maintaining a

state. However, Courts teaches wherein the web service maintains state for first

financial transaction authorization requests (col. 1, line 50 – col. 10, line 32). Willard

discloses transaction processing and authorization between a customer and a merchant

using computer networks. Courts discloses a user based system with multiple web

transactions. It would have been obvious to one of ordinary skill in the art at the time of

the invention to modify Willard to include the details of maintaining a state. Without a

way to manage state, between web transactions the system will have "forgotten"

information about the user and the context of the session. This can be further

complicated by the fact that in many large web systems the user does not interact with

the same web server from transaction to transaction.

75.   Regarding claim 42, Willard teaches a public interface, a gateway processor, a

financial network, and a public network. Willard discloses databases (¶ 37-50). Willard

does not specifically teach maintaining a state. However, Courts teaches including

database configured to maintain the state (col. 1, line 50 – col. 10, line 32). Willard

discloses transaction processing and authorization between a customer and a merchant
using computer networks. Courts discloses a user based system with multiple web
transactions. It would have been obvious to one of ordinary skill in the art at the time of
the invention to modify Willard to include the details of maintaining a state. Without a
way to manage state, between web transactions the system will have "forgotten"
information about the user and the context of the session. This can be further
complicated by the fact that in many large web systems the user does not interact with
the same web server from transaction to transaction. A database would allow the
collection managed and stored in one place and all accessible via the same server.

76.   Regarding claim 43, Willard teaches a public interface, a gateway processor, a
financial network, and a public network. Willard does not specifically teach web clusters.
However, Courts teaches a plurality of gateway processors configured to form a web
cluster (col. 1, line 50 – col. 10, line 32). Willard discloses transaction processing and
authorization between a customer and a merchant using computer networks. Courts
discloses a user based system with multiple web transactions. It would have been
obvious to one of ordinary skill in the art at the time of the invention to modify Willard to
include the details of a web cluster. With multiple servers providing the same service
there is resilience to failure and a load balancing between the servers.

77.   Regarding claim 44, Willard teaches a director configured to direct first financial

transaction authorization requests from a specific merchant to a specific gateway

processor (¶ 37, 65, 68).

78.   Regarding claim 45, Willard teaches a public interface, a gateway processor, a

financial network, and a public network. Willard does not specifically teach maintaining a

state. However, Courts teaches a state server accessible by the web cluster configured

to maintain state-related data (col. 1, line 50 – col. 10, line 32). Willard discloses

transaction processing and authorization between a customer and a merchant using

computer networks. Courts discloses a user based system with multiple web

transactions. It would have been obvious to one of ordinary skill in the art at the time of

the invention to modify Willard to include the details of maintaining a state. Without a

way to manage state, between web transactions the system will have "forgotten"

information about the user and the context of the session. This can be further

complicated by the fact that in many large web systems the user does not interact with

the same web server from transaction to transaction. A database would allow the

collection managed and stored in one place and all accessible via the same server.

79.   Claims 59 and 60 rejected under 35 U.S.C. 103(a) as being unpatentable over

Willard (US 20050192892 A1), in view Narin (US 6966034 B2), in further view of

Stewart et al (US 20020120846 A1) in further view of Epstein (US 20030004828 A1).

80.   Regarding claim 59, Willard teaches a public interface, a gateway processor, a
financial network, and a public network. Willard does not specifically teach duplicate
transactions. However, Stewart teaches wherein the gateway processor is configured to
recognize a duplicate financial transaction authorization request from the merchant
within a time limit (¶ 65-79). Willard discloses transaction processing and authorization
between a customer and a merchant using computer networks. Stewart discloses an
electronic payment and authentication system that includes features to verify the
authenticity of a payer, validate debit data, and facilitate debit payment transactions. It
would have been obvious to one of ordinary skill in the art at the time of the invention to
modify Willard to include the details of recognizing duplicate financial transactions.
Duplicate financial transactions charge the customer multiple times for an item
purchased. Depending on the amount charged the effects of charging multiple times
could cause problems to the customer. Having a system to recognize this saves time
and helps maintain good customer relations.

81.   Regarding claim 60, Willard teaches a public interface, a gateway processor, a
financial network, and a public network. Willard does not specifically teach duplicate
transactions. However, Stewart teaches wherein the gateway processor transmits a
message to the merchant in response to the duplicate message (¶ 65-79). Willard
discloses transaction processing and authorization between a customer and a merchant
using computer networks. Stewart discloses an electronic payment and authentication
system that includes features to verify the authenticity of a payer, validate debit data,

and facilitate debit payment transactions. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willard to include the details of recognizing duplicate financial transactions and sending a message. Duplicate financial transactions charge the customer multiple times for an item purchased. Depending on the amount charged the effects of charging multiple times could cause problems to the customer. Having a system to recognize this saves time and helps maintain good customer relations. When the message is sent it will inform the employee of the error and allows for the accurate settlement of the till at the end of the day.

82.   Examiner's Note: The Examiner has cited particular columns and line numbers in the references as applied to the claims for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMIE H. SWARTZ whose telephone number is

(571)272-7363. The examiner can normally be reached on 8:00am-4:30pm Monday-

Friday.

   If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, James Trammell can be reached on (571) 272-6712. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. H. S./
Examiner, Art Unit 3694

/James P Trammell/
Supervisory Patent Examiner, Art Unit 3694